

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Plant Abstract

Element Code: PDCHE040S0

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Atriplex torreyi* var. *griffithsii* Standl.

COMMON NAME: Griffith's saltbush, Griffiths' saltbush, Willcox Playa saltbush

SYNONYMS: *Atriplex lentiformis* ssp. *griffithsii* (Standley) Hall & Clements; *Atriplex lentiformis* var. *griffithsii* (Standley) L. Benson; *Atriplex griffithsii* (Standley) G.D. Brown.

FAMILY: Chenopodiaceae

AUTHOR, PLACE OF PUBLICATION: *Atriplex griffithsii* Standley, North American Flora 21(1): 63. 1916.

TYPE LOCALITY: Willcox Playa, Cochise County, Arizona, U.S.A.

TYPE SPECIMEN: HT: NY-6427. D. Griffiths 1895, 12 Oct 1900. IT: US

TAXONOMIC UNIQUENESS: *Atriplex torreyi* var. *griffithsii* closely resembles *Atriplex lentiformis* and initially was described as a subspecies of that taxon. It is 1 of 22 species of *Atriplex* found in Arizona, and is one of the largest saltbushes found in Arizona.

DESCRIPTION: A much-branched, gray-green shrub up to 1 m (3.3 ft) tall. FNA (1993+) reports plants from 3-10 dm (12-40 in) tall. The branchlets are slender, striately angled, and not spiny. Leaves are short-petiolate (petioles 1-2 mm) or sessile, elliptic-ovate to narrowly oblong, about 1-2 cm long, grayish with a fine scurf. They are thick (2-3.5 mm) in interrupted spikes borne in terminal, leafy-based panicles; staminate glomerules are beadlike. Plants are unisexual, the flowers in small clusters in more or less profuse terminal panicles, 5-20 cm (2-8 in). The very small staminate perianth is 4- or 5- cleft, while the pistillate flowers are without a perianth. Fruiting bracts are broadly heart-shaped, flat or convex on sides, united at base, 3-4(-4.5) x (3.5-) 5-6 mm. Seeds are 1.4-1.9 mm wide.

AIDS TO IDENTIFICATION: The common four-wing saltbush, *Atriplex canescens*, is the only other large shrubby saltbush in the area. Its fruiting bracts have four well-developed wings.

ILLUSTRATIONS: Color photo of specimen (*In*

http://scisun.nybg.org:8890/searchdb/owa/wwwcatalog.detail_list?this_id=4354668)

Color photo of Isotype (*In* US at

<http://ravenel.si.edu/botany/types//fullRecords.cfm?myFamily=>)

Color photo (*In*

http://www.desert-tropicals.com/Plants/Chenopodiaceae/Atriplex_griffithsii.html)

Color photo (R. Sivinski *in*

http://nmrareplants.unm.edu/photoimages/images/atrigi_det.jpg)

Line drawing (D. Hoard, 2001, *in*

<http://nmrareplants.unm.edu/drawings/atrgri.htm>)

TOTAL RANGE: Southwest New Mexico and southeast Arizona.

RANGE WITHIN ARIZONA: Wilcox vicinity, Cochise County. Reported from west of Pima, Pima County.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Evergreen shrub.

PHENOLOGY: Flowers August and September. According to FNA (1993+), flowering occurs from spring to winter.

BIOLOGY:

HABITAT: Grows principally in highly saline, alkaline soils on flats along the edges of playas where the soil is not submerged for long periods of time. Frequently, soil will be salt encrusted and pH 9 to 11. It is found in three general areas that occur at approximately the same latitude.

ELEVATION: 4,100 - 4,800 ft (1251-1464 m).

EXPOSURE: Level.

SUBSTRATE: Highly saline, alkaline soils, with pH 9-11.

PLANT COMMUNITY: Associated species include: *Atriplex acanthocarpa* (Armed saltbush), *Bouteloua barbata* (Six weeks gramma), *Hilaria* (=Pleuraphis) *mutica* (Tobosa), *Machaeranthera gypsitherma* (Gypsum Hotspring aster), *Sporobolus airoides* (Alkali sacaton), *Sporobolus wrightii* (Wright dropseed), *Suaeda* sp. (seepweed), and *Suaeda moquinii* (=torreyana, Alkali seepweed).

POPULATION HISTORY AND TRENDS: Was abundant at Willcox Playa but has not been surveyed lately. Reproductive status unknown (Warren 1994). Observations by T.H. Wootten before 1994, indicated that the species may be declining at Lordsburg Playa due to high sediment deposition. No population monitoring has been done in Arizona. In the past,

occurrences both near Demming, NM and on the Willcox Playa, AZ have failed to be relocated (NatureServe 2004).

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None (USDI, FWS 1996)
[3C (USDI, FWS 1983)]
[C2 (USDI, FWS 1980)]

STATE STATUS: None

OTHER STATUS: None

MANAGEMENT FACTORS: Factors that affect this species are land development, grazing, and mining.

PROTECTIVE MEASURES TAKEN: Bureau of Land Management, Safford Field Office, designated "Area of Critical Environmental Concern" on the northwest side of Willcox Playa that protects habitat for this species.

SUGGESTED PROJECTS: Surveys to determine the status and range of this species need to be performed as well as routine monitoring of Willcox Playa ACEC.

LAND MANAGEMENT/OWNERSHIP: BLM – Safford Field Office; DOD – Willcox Range; State Land Department; Private.

SOURCES OF FURTHER INFORMATION

REFERENCES:

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MAJOR KNOWLEDGEABLE INDIVIDUALS:

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Steve Bingham - Safford, Arizona

ADDITIONAL INFORMATION:

This species is also found in southern Pakistan on the coast of the Arabian Sea.

Revised: (AZNHP)
1994-10-11 (PLW)
1994-12-15 (DBI)
2004-05-14 (AMS)
2004-12-16 (SMS)

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